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4	14	(spermidine) near9 (lysis or lysing or lysed)	USPAT; US-PGPUB	2002/08/01 09:05
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=> s (spermine or spermidine) and (lysis or lysed or lysing)  
L1 255 (SPERMINE OR SPERMIDINE) AND (LYSIS OR LYSED OR LYSING)

=> dup rem l1  
PROCESSING COMPLETED FOR L1  
L2 141 DUP REM L1 (114 DUPLICATES REMOVED)

=> d 1-141 ti

L2	ANSWER 1 OF 141	CAPLUS	COPYRIGHT 2002 ACS	
TI	Interaction of natural polyamines and dimethylsilane analogues with membrane components			
L2	ANSWER 2 OF 141	MEDLINE		DUPLICATE 1
TI	Release of compact nucleoids with characteristic shapes from Escherichia coli.			
L2	ANSWER 3 OF 141	MEDLINE		DUPLICATE 2
TI	Isolation of the Escherichia coli nucleoid.			
L2	ANSWER 4 OF 141	CAPLUS	COPYRIGHT 2002 ACS	
TI	Nucleic acid transporter systems and their use in cell transformation			
L2	ANSWER 5 OF 141	CAPLUS	COPYRIGHT 2002 ACS	
TI	A kit for recovering RNA using adsorption of carbohydrate contaminants onto a polymer			
L2	ANSWER 6 OF 141	MEDLINE		DUPLICATE 3
TI	<b>Spermidine</b> acetyltransferase is required to prevent <b>spermidine</b> toxicity at low temperatures in Escherichia coli.			
L2	ANSWER 7 OF 141	CAPLUS	COPYRIGHT 2002 ACS	
TI	Water-based microsphere delivery system for proteins			
L2	ANSWER 8 OF 141	CAPLUS	COPYRIGHT 2002 ACS	
TI	Rapid and efficient method for isolating plant high molecular weight (HMW) DNA with high purity			
L2	ANSWER 9 OF 141	MEDLINE		
TI	Enhanced uptake of [3H] <b>spermidine</b> by 9L rat brain tumors after direct intratumoral infusion of inhibitors of enzymes of the polyamine biosynthetic pathway.			
L2	ANSWER 10 OF 141	MEDLINE		DUPLICATE 4
TI	Comparison of different methods for the isolation and purification of total community DNA from soil.			

L2 ANSWER 11 OF 141 MEDLINE DUPLICATE 5  
 TI Amine composition influences apparent activity of enzyme in charged film microcapsules.

L2 ANSWER 12 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 6  
 TI The cytoplasmic membrane as the site of the antimicrobial action of N-octylethanolamine.

L2 ANSWER 13 OF 141 MEDLINE DUPLICATE 7  
 TI Selective labelling of cell-surface polyamine-binding proteins on leukaemic and solid-tumour cell types using a new polyamine photoprobe.

L2 ANSWER 14 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 8  
 TI The plant cell wall is altered by inhibition of polyamine biosynthesis.

L2 ANSWER 15 OF 141 MEDLINE DUPLICATE 9  
 TI Retention of trypsin activity in **spermine** alginate microcapsules.

L2 ANSWER 16 OF 141 MEDLINE DUPLICATE 10  
 TI Stabilization of compact **spermidine** nucleoids from Escherichia coli under crowded conditions: implications for in vivo nucleoid structure.

L2 ANSWER 17 OF 141 MEDLINE DUPLICATE 11  
 TI A method to attach lectins to the surface of **spermine** alginate microcapsules based on the avidin biotin interaction.

L2 ANSWER 18 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Apparent inhibition of apoptosis by polyamines and aminothiols in DNA fragmentation assays is artifactual

L2 ANSWER 19 OF 141 MEDLINE DUPLICATE 12  
 TI Red blood cell polyamines, anaemia and tumour growth in the rat.

L2 ANSWER 20 OF 141 MEDLINE DUPLICATE 13  
 TI Large complexes of beta-poly(L-malate) with DNA polymerase alpha, histones, and other proteins in nuclei of growing plasmodia of Physarum polycephalum.

L2 ANSWER 21 OF 141 MEDLINE DUPLICATE 14  
 TI Transcription in vitro of Tetrahymena class II and class III genes.

L2 ANSWER 22 OF 141 MEDLINE DUPLICATE 15  
 TI B lymphocytes with latent EBV infection appearing in long-term bone marrow cultures (HLTBMCs) from haematological patients induce **lysis** of stromal microenvironment.

L2 ANSWER 23 OF 141 MEDLINE DUPLICATE 16  
 TI Dexamethasone inhibits nitric oxide-mediated cytotoxicity via effects on both macrophages and target cells.

L2 ANSWER 24 OF 141 MEDLINE DUPLICATE 17  
 TI Polyamines found in gingival fluid enhance the secretory and oxidative function of human polymorphonuclear leukocytes in vitro.

L2 ANSWER 25 OF 141 MEDLINE DUPLICATE 18  
 TI The effect of OA on proliferation and polyamine metabolism of K 562 leukemic cells and their responsiveness to natural killer cell activity.

L2 ANSWER 26 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 DUPLICATE 19  
 TI Comparative effects of fusion facilitators on electrofusion attributes of  
 N. tabacum mesophyll protoplasts.

L2 ANSWER 27 OF 141 MEDLINE DUPLICATE 20  
 TI Polyamine inhibition of transbilayer movement of plasma membrane  
 phospholipids in the erythrocyte ghost.

L2 ANSWER 28 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI Effects of polyamines on senescence in Lactuca sativa L.: II Stabilization  
 of leaf protoplasts.

L2 ANSWER 29 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Effects of polyamines on senescence in Lactuca sativa L. II. Stabilization  
 of leaf protoplasts

L2 ANSWER 30 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 DUPLICATE 21  
 TI 14C-labelling of cell wall of group B streptococci and optimization of  
 protoplast formation by mutanolysin.

L2 ANSWER 31 OF 141 MEDLINE  
 TI Treatment with a polyamine analog alters DNA-matrix association in HeLa  
 cell nuclei: a nucleoid halo assay.

L2 ANSWER 32 OF 141 MEDLINE DUPLICATE 22  
 TI In vitro activation of ammonia monooxygenase from Nitrosomonas europaea by  
 copper.

L2 ANSWER 33 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI Modelling the growth kinetics of Phanerochaete chrysosporium in submerged  
 static culture.

L2 ANSWER 34 OF 141 MEDLINE DUPLICATE 23  
 TI Squalamine: an aminosterol antibiotic from the shark.

L2 ANSWER 35 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI Effects of valinomycin on osmotic **lysis** of zymogen granules and  
 amylase exocytosis from parotid acini.

L2 ANSWER 36 OF 141 MEDLINE DUPLICATE 24  
 TI Structure of the novel steroidal antibiotic squalamine determined by  
 two-dimensional NMR spectroscopy.

L2 ANSWER 37 OF 141 MEDLINE DUPLICATE 25  
 TI N,N'-thiophene-substituted polyamine analogs inhibit mammalian host cell  
 invasion and intracellular multiplication of Trypanosoma cruzi.

L2 ANSWER 38 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 DUPLICATE 26  
 TI Rapid DNA extraction protocol from soil for polymerase chain  
 reaction-mediated amplification.

L2 ANSWER 39 OF 141 MEDLINE DUPLICATE 27  
 TI Ca(2+)-sensitive reduction of 5,5'-dithiobis-(2-nitrobenzoic acid) by rat  
 liver mitochondria.

L2 ANSWER 40 OF 141 MEDLINE DUPLICATE 28  
 TI Effects of cyclosporin A and a non-immunosuppressive analogue, O-acetyl  
 cyclosporin A, upon the growth of parent and multidrug resistant human

lung cancer cells in vitro.

- L2 ANSWER 41 OF 141 CAPLUS COPYRIGHT 2002 ACS  
TI Characterization of nuclear corticosteroid receptors in rat adipocytes. Regional variations and modulatory effects of hormones
- L2 ANSWER 42 OF 141 MEDLINE  
TI Characterisation of melarsen-resistant Trypanosoma brucei brucei with respect to cross-resistance to other drugs and trypanothione metabolism.
- L2 ANSWER 43 OF 141 MEDLINE DUPLICATE 29  
TI Abnormal accumulation and toxicity of polyamines in a difluoromethylornithine-resistant HTC cell variant.
- L2 ANSWER 44 OF 141 CAPLUS COPYRIGHT 2002 ACS  
TI Preparation and separation of intact chromosomes of vertebrates by one-dimensional pulsed-field gel electrophoresis (ODPFGE)
- L2 ANSWER 45 OF 141 MEDLINE DUPLICATE 30  
TI Polyamines as constituents of the outer membranes of Escherichia coli and Salmonella typhimurium.
- L2 ANSWER 46 OF 141 MEDLINE DUPLICATE 31  
TI Condensation of DNA by multivalent cations: considerations on mechanism.
- L2 ANSWER 47 OF 141 MEDLINE DUPLICATE 32  
TI Nuclear estradiol binding in rat adipocytes. Regional variations and regulatory influences of hormones.
- L2 ANSWER 48 OF 141 MEDLINE DUPLICATE 33  
TI A bacteriophage lambda DNA purification procedure suitable for the analysis of DNA from either large or multiple small lysates.
- L2 ANSWER 49 OF 141 MEDLINE DUPLICATE 34  
TI Feedback regulation of ornithine decarboxylase expression. Studies using a polysomal run-off system.
- L2 ANSWER 50 OF 141 MEDLINE DUPLICATE 35  
TI [Regulation by biogenic amines of energy functions of mitochondria]. Regulatsiia biogennymi aminami energeticheskikh funktsii mitokhondrii.
- L2 ANSWER 51 OF 141 CAPLUS COPYRIGHT 2002 ACS  
TI Permeability of the mitochondrial outer membrane to organic cations
- L2 ANSWER 52 OF 141 MEDLINE DUPLICATE 36  
TI Hepatic mitochondrial membranolysis repairing by **spermidine**.
- L2 ANSWER 53 OF 141 MEDLINE DUPLICATE 37  
TI Enhanced uptake of **spermidine** and methylglyoxal-bis(guanyldrazone) by rat liver mitochondria following outer membrane **lysis**.
- L2 ANSWER 54 OF 141 MEDLINE DUPLICATE 38  
TI [Inter-organ differences of the cytometric DNA content in mice: relation of the staining method]. Differences inter-organes du contenu cytométrique en ADN chez la Souris: relations avec la méthode de coloration.
- L2 ANSWER 55 OF 141 CAPLUS COPYRIGHT 2002 ACS  
TI Biological activity of photoproducts of 8-MOP-**spermine**
- L2 ANSWER 56 OF 141 CAPLUS COPYRIGHT 2002 ACS

TI Antioxidant effects of exogenous polyamines in damage of lysosomes inflicted by xanthine oxidase or stimulated polymorphonuclear leukocytes  
 L2 ANSWER 57 OF 141 MEDLINE DUPLICATE 39  
 TI Effect of **spermine** on membranolytic effect of vitamin A in rats.  
 L2 ANSWER 58 OF 141 MEDLINE DUPLICATE 40  
 TI Effect of methylglyoxal bis(guanylhydrazone) on hepatic, heart and skeletal muscle mitochondrial carnitine palmitoyltransferase and beta-oxidation of fatty acids.  
 L2 ANSWER 59 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Outer membrane **lysis** increases accessibility of cationic drugs to the inner mitochondrial membrane  
 L2 ANSWER 60 OF 141 MEDLINE DUPLICATE 41  
 TI Trypanosoma brucei: polyamine oxidase mediated trypanolytic activity in the serum of naturally resistant cattle.  
 L2 ANSWER 61 OF 141 MEDLINE DUPLICATE 42  
 TI The plasma membrane of yeast protoplasts exposed to hypotonicity becomes porous but does not disintegrate in the presence of protons or polyvalent cations.  
 L2 ANSWER 62 OF 141 MEDLINE  
 TI Correlation between outer-membrane **lysis** and susceptibility of mitochondria to inhibition by adriamycin and polyamines.  
 L2 ANSWER 63 OF 141 MEDLINE DUPLICATE 43  
 TI K+-stimulated p-nitrophenyl phosphatase is not a partial reaction of the gastric (H+ + K+)-transporting ATPase. Evidence supporting a new model for the univalent-cation-transporting ATPase systems.  
 L2 ANSWER 64 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI OUTER MEMBRANE **LYSIS** INCREASES ACCESSIBILITY OF CATIONIC DRUGS TO THE INNER MITOCHONDRIAL MEMBRANE.  
 L2 ANSWER 65 OF 141 MEDLINE DUPLICATE 44  
 TI A method for flow cytometric cell cycle analysis of normal and psoriatic human epidermis based on a detergent/citric acid technique for suspension of nuclei.  
 L2 ANSWER 66 OF 141 MEDLINE DUPLICATE 45  
 TI Polyamine oxidase-mediated trypanosome killing: the role of hydrogen peroxide and aldehydes.  
 L2 ANSWER 67 OF 141 MEDLINE DUPLICATE 46  
 TI Factors affecting the isolation of CCC DNA from Streptomyces lividans and Escherichia coli.  
 L2 ANSWER 68 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Polyamines in moderately halophilic bacteria and their physiological role  
 L2 ANSWER 69 OF 141 MEDLINE  
 TI Urinary excretion of monoacetyl polyamines in patients with non-Hodgkin's lymphoma.  
 L2 ANSWER 70 OF 141 MEDLINE DUPLICATE 47  
 TI Lytic action of cloned phi X174 gene E.  
 L2 ANSWER 71 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 DUPLICATE 48

TI ISOLATION AND PURIFICATION OF RAT HEPATOMA NUCLEI ACTIVE IN THE TRANSPORT OF MESSENGER RNA IN-VITRO.

L2 ANSWER 72 OF 141 MEDLINE DUPLICATE 49  
 TI Effect of leukocyte hydrolases on bacteria XVI. Activation by leukocyte factors and cationic substances of autolytic enzymes in Staphylococcus aureus: modulation by anionic polyelectrolytes in relation to survival of bacteria in inflammatory exudates.

L2 ANSWER 73 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI An improved technique for the isolation of higher plant chromosomes

L2 ANSWER 74 OF 141 MEDLINE  
 TI Effect of polyamines and cations on the in vitro methylation of histones.

L2 ANSWER 75 OF 141 MEDLINE DUPLICATE 50  
 TI Excretion of polyamines from baby hamster kidney cells (BHK-21/C13: effect of infection with Herpes Simplex Virus Type 1.

L2 ANSWER 76 OF 141 MEDLINE DUPLICATE 51  
 TI Studies on Escherichia coli chromosome proteins. I. Analysis of the proteins by two-dimensional gel electrophoresis.

L2 ANSWER 77 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI STRUCTURE OF THE CHROMATIN OF THE NUCLEI OF RAT THYMUS **LYSED** ON EPIGASTRIUM.

L2 ANSWER 78 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 52  
 TI EFFECT OF POLY CATIONS ON THERMAL DAMAGE OF CHLAMYDOMONAS-REINHARDII PROTOPLASTS.

L2 ANSWER 79 OF 141 MEDLINE  
 TI Inability of the C3a anaphylatoxin to promote cellular **lysis**.

L2 ANSWER 80 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Effect of leukocyte hydrolases on bacteria. XIII. Role played by leukocyte extracts, lysolecithin, phospholipase A2, lysozyme, cationic proteins, and detergents in the solubilization of lipids from Staphylococcus aureus and group A streptococci

L2 ANSWER 81 OF 141 MEDLINE DUPLICATE 53  
 TI RNA synthesis in isolated nuclei of the dinoflagellate Cryptocodinium cohnii.

L2 ANSWER 82 OF 141 MEDLINE DUPLICATE 54  
 TI Excretion of **spermidine** from BHK-21/C13 cells exposed to 6-thioguanosine.

L2 ANSWER 83 OF 141 MEDLINE DUPLICATE 55  
 TI Folded chromosomes of vegetative Bacillus subtilis: composition and properties.

L2 ANSWER 84 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Preparation of large molecular weight DNA from the fungus Aspergillus nidulans

L2 ANSWER 85 OF 141 MEDLINE  
 TI Identification of a biochemically unique DNA-membrane interaction involving the Escherichia coli origin of replication.

L2 ANSWER 86 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.

DUPLICATE 56  
 TI POLY AMINES RNASE AND THE IMPROVEMENT OF OAT LEAF PROTOPLASTS.

L2 ANSWER 87 OF 141 MEDLINE DUPLICATE 57  
 TI **Spermidine**-Deoxyribonucleic acid interaction in vitro and in Escherichia coli.

L2 ANSWER 88 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 58  
 TI STABILIZATION OF OAT LEAF PROTOPLASTS THROUGH POLY AMINE MEDIATED INHIBITION OF SENESENCE.

L2 ANSWER 89 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI PURIFICATION AND CHARACTERIZATION OF THE LYTIC ENZYME N ACETYLMURAMYL-L ALANINE AMIDASE OF BACTERIO PHAGE T-7.

L2 ANSWER 90 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI STABILIZATION OF OAT LEAF PROTOPLASTS BY L ARGININE L LYSINE AND POLY AMINES.

L2 ANSWER 91 OF 141 MEDLINE DUPLICATE 59  
 TI Autolysis of Neisseria gonorrhoeae.

L2 ANSWER 92 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 60  
 TI PHYSIOLOGICAL STUDIES ON AN ISOLATE OF SAPROLEGNIA-FERAX FROM THE LARVAL GUT ON THE BLACK FLY SIMULIUM-VITTATUM.

L2 ANSWER 93 OF 141 MEDLINE  
 TI 1,4-Diaminobutane (putrescine), **spermidine**, and **spermine**

L2 ANSWER 94 OF 141 MEDLINE DUPLICATE 61  
 TI Association of the folded chromosome with the cell envelope of E. coli: characterization of the proteins at the DNA-membrane attachment site.

L2 ANSWER 95 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 62  
 TI THE EFFECT OF LYSOZYME ON DNA MEMBRANE ASSOCIATION IN ESCHERICHIA-COLI.

L2 ANSWER 96 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Cell division, macromolecular synthesis, and morphology dependent on the state of the envelope in a mutant of Klebsiella pneumoniae

L2 ANSWER 97 OF 141 MEDLINE DUPLICATE 63  
 TI Osmotic **lysis** of sphaeroplasts from Saccharomyces cerevisiae grown anaerobically in media containing different unsaturated fatty acids.

L2 ANSWER 98 OF 141 MEDLINE DUPLICATE 64  
 TI Antipolyamine antibodies and cell **lysis**. The inhibitory effect of putrescine.

L2 ANSWER 99 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Effect of ionic strength, pH amines, and divalent cations on the lytic activity of T 4 lysozyme

L2 ANSWER 100 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Electrophoretic mobility of BP8 ascites tumor cells and allergized lymph-node cells after treatment with inflammatory mediators, ptomaines, polyamines, antisera, and neuraminidase or heparin

L2 ANSWER 101 OF 141 MEDLINE DUPLICATE 65



TI Thermal **lysis** of bacterial membranes and its prevention by polyamines.

L2 ANSWER 102 OF 141 MEDLINE DUPLICATE 66  
 TI Effect of **spermine** on host-cell **lysis** and reproduction by a lactic streptococcal bacteriophage.

L2 ANSWER 103 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Distribution of polysomes, ribosomes, and ribosomal subunits in exponential-phase cells of *Bacillus licheniformis*

L2 ANSWER 104 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Inhibition of cell division in *Micrococcus lysodeikticus* dis-II

L2 ANSWER 105 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Efficiency of tritium counting with seven radioautographic emulsions

L2 ANSWER 106 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI **Lysis** of *Desulfovibrio vulgaris* by ethylenediaminetetraacetic acid and lysozyme

L2 ANSWER 107 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Role of galactose or glucose 1-phosphate in preventing the **lysis** of *Streptococcus diacetilactis*

L2 ANSWER 108 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI RNA polymerase (ribonucleotide triphosphate-ribonucleic acid ribonucleotidyl transferase)

L2 ANSWER 109 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Metabolic **lysis** of yeast protoplasts

L2 ANSWER 110 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI The effects of various anions and cations on the **lysis** of yeast protoplasts by osmotic shock

L2 ANSWER 111 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Replication of T4fII bacteriophage in *Escherichia coli* K-12 ( $\lambda$ .)

L2 ANSWER 112 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Responses of a psychrophilic marine bacterium to changes in its ionic environment

L2 ANSWER 113 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Uptake and subcellular localization of tritiated **spermine** in *Escherichia coli*

L2 ANSWER 114 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Studies on the interaction of homologs of **spermine** with deoxyribonucleic acid and with bacterial protoplasts

L2 ANSWER 115 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI RNA synthesis in intact rat liver nuclei

L2 ANSWER 116 OF 141 MEDLINE DUPLICATE 67  
 TI **Lysis** of *Vibrio succinogenes* by ethylenediamine-tetraacetic acid or lysozyme.

L2 ANSWER 117 OF 141 MEDLINE DUPLICATE 68  
 TI Effect of **spermine** on **lysis** and reproduction by bacteriophages phi-X174,  $\lambda$ , and f2.

L2 ANSWER 118 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Simple method for concentrating bacteriophage .phi.X174

L2 ANSWER 119 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Function and location of a "germination enzyme" in spores of Bacillus cereus

L2 ANSWER 120 OF 141 MEDLINE DUPLICATE 69  
 TI Steroid **lysis** of protoplasts and effects of stabilizers and steroid antagonists.

L2 ANSWER 121 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Antiphage action of oxidized polyamines

L2 ANSWER 122 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Lactose utilization in a cryptic strain Escherichia coli ML 35

L2 ANSWER 123 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Stabilization of Streptococcus faecalis protoplasts by **spermine**

L2 ANSWER 124 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Factors influencing osmotic fragility of Mycoplasma

L2 ANSWER 125 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Conditions for inactivation of bacteriophages T1-T7 by a polyanion

L2 ANSWER 126 OF 141 MEDLINE DUPLICATE 70  
 TI Mechanism of protection of cells by **spermine** against lysozyme-induced **lysis**.

L2 ANSWER 127 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Inhibitory effect of glycine on the production of amylase and proteinase by Bacillus subtilis. IV. Comparison in cytological effect of glycine on glycine-sensitive and resistant strains

L2 ANSWER 128 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI **Lysis** of Mycoplasma, bacterial protoplasts, spheroplasts, and L-forms by various agents

L2 ANSWER 129 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Stabilization of protoplasts and spheroplasts by **spermine** and other polyamines

L2 ANSWER 130 OF 141 MEDLINE DUPLICATE 71  
 TI Inhibition of reticulocyte **lysis** by alkyl polyamines.

L2 ANSWER 131 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Streptomycin-triggered depolymerization of ribonucleic acid in Escherichia coli

L2 ANSWER 132 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI The interaction of **spermine** and native deoxyribonucleic acid (DNA)

L2 ANSWER 133 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Glycine-induced cell **lysis** and inhibition of enzyme production

L2 ANSWER 134 OF 141 MEDLINE  
 TI **Spermine** as a protective agent against osmotic **lysis**.

L2 ANSWER 135 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI **Spermine** as a protective agent against osmotic **lysis**

L2 ANSWER 136 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Bacterial agglutination induced by basic polypeptides originating from organ tissues

L2 ANSWER 137 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Stabilizing effect of **spermine** and related polyamines and bacterial chloroplasts

L2 ANSWER 138 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Presence of polyamines in certain bacterial viruses

L2 ANSWER 139 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI **Lysis** of Bacillus subtilis by amines, acridines, and phenothiazines

L2 ANSWER 140 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 TI Scientific and practical value of some tests of neoplasm malignancy with particular reference to larynx cancer. (The Tukuoka reaction and the test of Bolen.)

L2 ANSWER 141 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC.  
 TI PROTECTIVE ACTION OF POLY AMINES ON THERMAL **LYSIS** OF PROTOPLASTS OF MICROCOCCUS-LYSODEIKTICUS AND BACILLUS-SUBTILIS.

=> d 110 bib ab

L2 ANSWER 110 OF 141 CAPLUS COPYRIGHT 2002 ACS  
 AN 1968:400938 CAPLUS  
 DN 69:938  
 TI The effects of various anions and cations on the **lysis** of yeast protoplasts by osmotic shock  
 AU Indge, K. J.  
 CS Univ. Manchester, Manchester, Engl.  
 SO J. Gen. Microbiol. (1968), 51(3), 425-32  
 CODEN: JGMIAN  
 DT Journal  
 LA English  
 AB The resistance of Saccharomyces carlsbergensis protoplasts to **lysis** by osmotic shock was lowered by such chelating agents as citrate, EDTA, and ATP at concns. of 0.01 M and also by decreases in pH values from 7.4-5.3. The effects of the chelating agents on protoplast **lysis** were inhibited by K<sup>+</sup>, Na<sup>+</sup>, and Mg<sup>2+</sup> and **spermidine**. Chelating agents increased **lysis** only during osmotic stress, and the cations did not influence **lysis** unless chelators were also present. This suggested a cation-binding site in the protoplast membrane which is involved in maintaining membrane structure. 19 references.

=> d 67 84 bib ab

L2 ANSWER 67 OF 141 MEDLINE DUPLICATE 46  
 AN 85038968 MEDLINE  
 DN 85038968 PubMed ID: 6387733  
 TI Factors affecting the isolation of CCC DNA from Streptomyces lividans and Escherichia coli.  
 AU Kieser T  
 SO PLASMID, (1984 Jul) 12 (1) 19-36.  
 Journal code: 7802221. ISSN: 0147-619X.  
 CY United States

DT Journal; Article; (JOURNAL ARTICLE)

LA English

FS Priority Journals

EM 198411

ED Entered STN: 19900320

Last Updated on STN: 19900320

Entered Medline: 19841128

AB Based on the results of a systematic study of factors affecting plasmid yield and purity, a procedure suitable for the rapid screening for and isolation of covalently closed circular DNA from *Streptomyces lividans* and *Escherichia coli* was developed. The method consists of **lysis** of lysozyme-treated bacteria combined with alkaline denaturation of DNA at high temperature. Renaturation of CCC DNA and precipitation of single-stranded DNA together with protein is achieved by the addition of a minimal amount of phenol/chloroform. The screening procedure uses only a single tube and the samples can be analyzed by agarose gel electrophoresis about 30 min after **lysis**. Removal of phenol and further purification of the plasmid preparation is achieved by consecutive precipitations with isopropanol and **spermine**, followed by extraction with ethanol, producing samples suitable for restriction endonuclease digestion, ligation, and transformation of *S. lividans* protoplasts or competent *E. coli* cells in about 2 h. All steps of the procedure are explained in detail with information about the effects of changing parameters. This should help the experimenter to obtain reproducible results and may be useful if the method has to be adapted to new strains or plasmids.

L2 ANSWER 84 OF 141 CAPLUS COPYRIGHT 2002 ACS

AN 1978:593454 CAPLUS

DN 89:193454

TI Preparation of large molecular weight DNA from the fungus *Aspergillus nidulans*

AU Morris, N. Ronald

CS Dep. Pharmacol., Coll. Med. Dent. New Jersey, Piscataway, N. J., USA

SO J. Gen. Microbiol. (1978), 106(2), 387-9

CODEN: JGMIAN; ISSN: 0022-1287

DT Journal

LA English

AB Large-mol.-wt. DNA was prepd. from the spores of *A. nidulans* by vortexing the spores with glass beads in a **spermidine** buffer to minimize DNA shearing during vortexing. Intracellular DNase mols. were inhibited by EDTA. Recovery was .apprx.250 .mu.g DNA/g spores. Large-mol.-wt. DNA was also prepd. by detergent **lysis** of protoplasts prepd. from *A. nidulans* mycelia by modification of the method of O. M. H. de Vries (1974); recovery was .apprx.450 .mu.g DNA/g protoplasts. The DNA from both sources had a mol. wt. of .apprx.3 .times. 107.

=> FIL STNGUIDE

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LAST RELOADED: Jul 30, 2002 (20020730/UP).

=> d 48 73 bib ab

YOU HAVE REQUESTED DATA FROM FILE 'MEDLINE, BIOSIS, CAPLUS' - CONTINUE? (Y)/N:y

L2 ANSWER 48 OF 141 MEDLINE DUPLICATE 33  
AN 90252973 MEDLINE  
DN 90252973 PubMed ID: 2160201  
TI A bacteriophage lambda DNA purification procedure suitable for the  
analysis of DNA from either large or multiple small lysates.  
AU Lockett T J  
CS CSIRO Division of Biotechnology, Laboratory for Molecular Biology, North  
Ryde, New South Wales, Australia.  
SO ANALYTICAL BIOCHEMISTRY, (1990 Mar) 185 (2) 230-4.  
Journal code: 0370535. ISSN: 0003-2697.  
CY United States  
DT Journal; Article; (JOURNAL ARTICLE)  
LA English  
FS Priority Journals  
EM 199006  
ED Entered STN: 19900720  
Last Updated on STN: 19970203  
Entered Medline: 19900621  
AB A method for the efficient preparation of high quality bacteriophage  
lambda DNA from cleared lysates is described. Advantages of the method  
include high DNA yields (typically around 0.8 micrograms of DNA/1 ml of  
cleared lysate), speed of processing (approximately 2 h from lysate to  
DNA), economy, and the absence of any requirement for phenol or chloroform  
extractions. The technique involves the concentration of phage particles  
by standard polyethylene glycol precipitation followed by enzymatic  
treatment to remove contaminating RNA and DNA. Phage particles are then  
**lysed** with sodium dodecyl sulfate (SDS) at elevated pH and  
temperature. Contaminating protein/SDS complexes are rendered insoluble by  
the addition of potassium acetate and removed by centrifugation. The  
quality of the resultant DNA is comparable to that prepared by cesium  
chloride banding for all standard molecular biological purposes providing  
that **spermidine** is included in all restriction endonucleases  
digestions.

L2 ANSWER 73 OF 141 CAPLUS COPYRIGHT 2002 ACS  
AN 1982:118447 CAPLUS  
DN 96:118447  
TI An improved technique for the isolation of higher plant chromosomes  
AU Griesbach, R. J.; Malmberg, R. L.; Carlson, P. S.  
CS Dep. Hortic., Michigan State Univ., East Lansing, MI, 48824, USA  
SO Plant Sci. Lett. (1982), 24(1), 55-60  
CODEN: PTSLAF; ISSN: 0304-4211  
DT Journal  
LA English  
AB An improved cell **lysis** buffer is described for the isolation of  
physiol. active mitotic and meiotic chromosomes from a large no. of plant  
species (corn, lily, tomato, pea, onion, day lily, tobacco, and broad  
bean) and from a wide variety of tissues (root tips, microsporocytes, and  
cells from tissue cultures). The method involved digestion with a soln.  
contg. colchicine, cellulysin, macerasc, pectinase, rhozyme, and mannitol  
at pH 5.7, passage through a pasteur pipet, collection of the protoplasts  
by centrifugation, treatment with the **lysis** buffer, and passage  
through a 27-gauge hypodermic needle. Of the various **lysis**  
buffers examd., optimum results were obtained with a buffer contg. 15 mM

HEPES, 1 mM EDTA, 15 mM dithiothreitol, 0.5 mM **spermine**, 80 mM KCl, 20 mM NaCl, 300 mM sucrose, and 500 mM hexylene glycol at pH 7.0. The isolated structures morphol. resembled chromosomes with primary and secondary constrictions and contained DNA that was stained by DNA-specific dyes. The recovery of chromosomes ranged 24-71% and varied with the species and the tissue.

=> d 3, 5, 38 bib ab

YOU HAVE REQUESTED DATA FROM FILE 'MEDLINE, BIOSIS, CAPLUS' - CONTINUE? (Y)/N:y

L2 ANSWER 3 OF 141 MEDLINE DUPLICATE 2  
AN 2001189905 MEDLINE  
DN 21175596 PubMed ID: 11278063  
TI Isolation of the Escherichia coli nucleoid.  
AU Cunha S; Odijk T; Suleymanoglu E; Woldringh C L  
CS Swammerdam Institute for Life Sciences, BioCentrum Amsterdam, University of Amsterdam, Kruislaan 316, 1098 SM Amsterdam, The Netherlands.  
SO BIOCHIMIE, (2001 Feb) 83 (2) 149-54. Ref: 33  
Journal code: 1264604. ISSN: 0300-9084.  
CY France  
DT Journal; Article; (JOURNAL ARTICLE)  
General Review; (REVIEW)  
(REVIEW, TUTORIAL)  
LA English  
FS Priority Journals  
EM 200106  
ED Entered STN: 20010611  
Last Updated on STN: 20010611  
Entered Medline: 20010607  
AB Numerous protocols for the isolation of bacterial nucleoids have been described based on treatment of cells with sucrose-lysozyme-EDTA and subsequent **lysis** with detergents in the presence of counterions (e.g., NaCl, **spermidine**). Depending on the **lysis** conditions both envelope-free and envelope-bound nucleoids could be obtained, often in the same lysate. To investigate the mechanism(s) involved in compacting bacterial DNA in the living cell, we wished to isolate intact nucleoids in the absence of detergents and high concentrations of counterions. Here, we compare the general **lysis** method using detergents with a procedure involving osmotic shock of Escherichia coli spheroplasts that resulted in nucleoids free of envelope fragments. After staining the DNA with DAPI (4',6-diamidino-2-phenylindole) and cell **lysis** by either isolation procedure, free-floating nucleoids could be readily visualized in fluorescence microscope preparations. The detergent-salt and the osmotic-shock nucleoids appeared as relatively compact structures under the applied ionic conditions of 1 M and 10 mM, respectively. RNase treatment caused no dramatic changes in the size of either nucleoid.

L2 ANSWER 5 OF 141 CAPLUS COPYRIGHT 2002 ACS  
AN 2000:741033 CAPLUS  
DN 133:278360  
TI A kit for recovering RNA using adsorption of carbohydrate contaminants onto a polymer  
IN Kiefer, Evelyn; Heller, Werner; Ernst, Dietrich; Sandermann, Heinrich  
PA Gsf-Forschungszentrum fur Umwelt und Gesundheit, G.m.b.H., Germany  
SO Eur. Pat. Appl., 10 pp.  
CODEN: EPXXDW  
DT Patent  
LA German

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1044984	A2	20001018	EP 2000-108179	20000413
	EP 1044984	A3	20010613		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	DE 19916534	A1	20001019	DE 1999-19916534	19990413
PRAI	DE 1999-19916534	A	19990413		
AB	A kit for the purifn. of RNA from a wide array of biol. samples is described. The kit uses a <b>lysis</b> buffer contg. a polymer that can be used to capture carbohydrates that copurify with the RNA immediately upon liberation and simplify the procedure. The preferred polymer is polyvinylpyrrolidone. Use of the method to isolate RNA from of no. of green and woody plants is demonstrated. The material was heated in the <b>lysis</b> buffer (Tris Hcl pH 8.0 40mM, CTAB 3%, PVP 2%, EDTA 50mM, NaCl 2M, <b>Spermidine</b> , 0.5 g/L, .beta.-mercaptoethanol 2%) at 65.degree. for 5 min. This was cooled, mixed with chloroform/isoamyl alc. and a sorbent (Nucleon PhytoPure Resin) to capture the RNA. The RNA can then be collected by solvent extn. and pptn. with DNA removed with DNase.				
L2	ANSWER 38 OF 141 BIOSIS COPYRIGHT 2002 BIOLOGICAL ABSTRACTS INC. DUPLICATE 26				
AN	1993:124223 BIOSIS				
DN	PREV199395068323				
TI	Rapid DNA extraction protocol form soil for polymerase chain reaction-mediated amplification.				
AU	Smalia, K. (1); Cresswell, N.; Mendonca-Hagler, L. C.; Wolters, A.; Van Elsas, J. D.				
CS	(1) Institute Biochemistry and Plant Virol., Biologische Bundesanstalt, Messeweg 11/12, Braunschweig Germany				
SO	Journal of Applied Bacteriology, (1993) Vol. 74, No. 1, pp. 78-85. ISSN: 0021-8847.				
DT	Article				
LA	English				
AB	A simple and rapid method of DNA extraction from soil was developed and DNA was made suitable for subsequent efficient amplification by the polymerase chain reaction (PCR). Key features of the extraction and purification were cold lysozyme- and SDS-assisted <b>lysis</b> with either freezing-thawing or bead beating, cold phenol extraction of the resulting soil suspension, CsCl and KAc precipitation and, finally, <b>spermine</b> -HCl or glass milk purification of DNA. Crude DNA preparations contained 4-20 mu-g DNA per g of soil extracted, and at least 50% of this was recovered in the final purified DNA preparations. The resulting DNA was pure enough to be restricted by various enzymes, and was amplifiable at concentrations of up to 20 ng of soil-derived DNA per 50 mu-l reaction mix. Amplification of a 683 bp target sequence, pat, was performed with different Taq DNA polymerases. Application of the protocol enabled us to detect target DNA derived from roughly 10 <sup>-3</sup> introduced <i>Pseudomonas fluorescens</i> (RP4::pat) cfu per g of soil. The fate of an introduced population in the soil could be followed to this limit with PCR-assisted detection of target DNA. In addition, target DNA was detected in soil 5 months after release, when the introduced organism was no longer detectable on selective agar plates. The extraction and purification protocol applied to various different soil types resulted in DNA of sufficient purity to permit amplification by PCR.				

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